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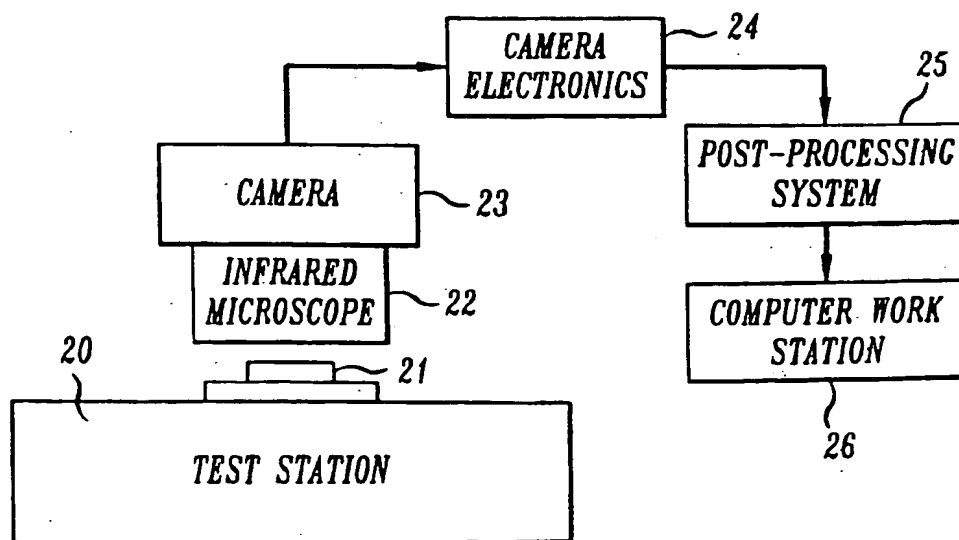
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(54) Method of making and testing a semiconductor device

(57) The inventive methods of making a semiconductor device, e.g., a laser, comprise thermal (e.g., 3-5 μm wavelength) imaging of a powered, partially completed device. The thermal image is obtained with apparatus that is capable of forming a substantially diffraction-limited image on a sensor array with an acquisition

time of no more than 0.1 seconds, preferable no more than 0.01 seconds. In preferred embodiments, the image has temperature resolution of 0.01°C or better. Exemplary apparatus is disclosed. The inventive method facilitates, for instance, early identification of devices that are likely to fail lifetime requirements.

FIG. 2



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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
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			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			G01R
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 July 1996	Examiner Hoornaert, W
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons & : member of the same patent family, corresponding document</p>			

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